

Art Unit: ***

CLMPTO

8/8/02

TD

1. A method, comprising:
 - 5 receiving audiovisual data from a desired transmission channel;
if said audiovisual data is not compressed according to a predetermined format, compressing said received audiovisual data according to said predetermined format;
storing, in a mass storage device and for a predefined period of time,
0 compressed audiovisual data received from said desired transmission channel;
and
in response to a user request, providing to said user said stored compressed audiovisual data beginning with a portion of said stored compressed audiovisual data having associated with it a first temporal
5 parameter.

2. (newly added) In a system adapted to receive broadcast content from each of a plurality of content sources and forward said received broadcast content to a transport network for distribution to subscribers, a method comprising:
 - in response to a subscriber request for desired broadcast content, storing said desired broadcast content in a server;
 - forwarding said desired broadcast content to said transport network for distribution to said requesting subscriber; and
 - In response to a subscriber request for temporally shifted content associated with said desired broadcast content, forwarding said stored broadcast content to said transport network for distribution to said requesting subscriber.

Art Unit: ***

3. (newly added) The method of claim 2, further comprising:
forwarding to said transport network only the received broadcast content presently requested by any subscriber.
4. (newly added) The method of claim 2, further comprising:
storing, in said server, broadcast content presently requested by a threshold number of subscribers.
5. (newly added) The method of claim 2, wherein said storing of said desired broadcast content comprises storing a temporally sub-sampled version of the desired broadcast content to generate a fast-forward track.
6. (newly added) The method of claim 2, wherein said storing of said desired broadcast content comprises storing a temporally sub-sampled version of the desired broadcast content in reverse order to generate a reverse track.

Art Unit: ***

7. (newly added) The method of claim 2, wherein said storing of said desired broadcast content comprises storing a version of the desired broadcast content to generate a play track.
8. (newly added) The method of claim 2, further comprising, storing selected broadcast content during a predetermined time interval of a broadcast schedule.
9. (newly added) The method of claim 2, wherein said subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift interactive programming guide screen.
10. (newly added) The method of claim 2, wherein said subscriber request for temporally shifted content is initiated by receiving a subscriber title selection from a time shift navigation screen.
11. (newly added) The method of claim 2, wherein said subscriber request for temporally shifted content is initiated by receiving a pause or rewind subscriber selection while broadcasting of said desired content.
12. (newly added) A method for providing video information in an interactive information distribution system to a plurality of subscribers, comprising:
 - receiving a plurality of scheduled broadcast programs in real-time;
 - selecting a portion of said broadcast programs;
 - processing said selected broadcast programs into temporally adjusted content, such that the temporally adjusted content is associated with said selected broadcast programs;
 - storing said temporally adjusted content;
 - broadcasting said plurality of scheduled broadcast programs to said plurality of subscribers; and

Art Unit: ***

in a first mode of operation, streaming, on-demand, said temporally adjusted content to those subscribers viewing said selected broadcast programs currently being broadcast, such that said subscribers may interactively activate such temporally adjusted content contemporaneously with said currently broadcast programs.

13. (newly added) The method of claim 12, wherein in an alternate mode of operation, streaming, on-demand, said temporally adjusted content to those subscribers viewing said selected broadcast programs previously broadcast, such that said subscribers may interactively activate such temporally adjusted content during viewership of said previously broadcast programs.

14. (newly added) The method of claim 13, wherein said requesting subscribers may interactively switch between said first and second modes of operation.

15. (newly added) The method of claim 12, wherein said selecting step comprises:
monitoring subscriber viewership; and
selecting those broadcast programs having a viewership exceeding a predetermined metric.

16. (newly added) The method of claim 12, wherein said selecting step further comprises:
generating title plans for identifying said broadcast programs to be temporally adjusted; and
defining a temporal availability window for each program.

17. (newly added) The method of claim 16, wherein said processing step comprises:

Art Unit: ***

generating real-time encoded play tracks, fast-forward tracks, rewind tracks, and entry point data (EPD) files associated with each track., said fast-forward tracks and rewind tracks forming said temporally adjusted content.

18. (newly added) The method of claim 17, wherein said processing step further comprises:

encoding said broadcast programs identified in said title plan to form said temporally adjusted programs; and
buffering said encoded broadcast programs.

19. (newly added) The method of claim 18, wherein said processing step further comprises:

receiving packetized transport streams from at least one encoder; and
inserting title identification codes (TICs) to each packet to enable said transport streams to be identified as said real-time encoded play tracks, fast-forward tracks, and rewind tracks.

20. (newly added) The method of claim 19, further comprising:

generating said EPD files as said fast-forward and rewind tracks are being created.

21. (newly added) The method of claim 20, wherein said EPD files provide transition between streaming of the Play, FF and RW tracks at appropriate points in response to user commands.

22. (newly added) The method of claim 18, wherein said storing step comprises:

receiving said buffered encoded broadcast programs;
storing said real-time play tracks in a plurality of extents;
storing said fast-forward tracks in extents in a front to back order; and

Art Unit: ***

storing said rewind tracks in extents in a back to front order.

23. (newly added) The method of claim 22, where said storing step further comprises storing selected broadcast programs from a particular channel for a fixed window of time.

24. (newly added) The method of claim 22, where said storing step further comprises storing selected broadcast programs from a plurality of channels.

25. (newly added) The method of claim 12, wherein said first mode of operation further comprises

providing an interactive program guide (IPG) to said subscribers having screens presenting said selected broadcast programs having temporally adjusted content for viewing and selection.

26. (newly added) The method of claim 12, wherein said second mode of operation further comprises

providing a navigator list to said subscribers having screens presenting said selected broadcast programs having temporally adjusted content for viewing and selection.

27. (newly added) The method of claim 12, wherein said first mode of operation further comprises receiving a temporal control message from a subscriber selected from the group of temporal control messages consisting of pause, rewind, and fast-forward.

28. (newly added) An apparatus for providing video information in an interactive information distribution system to a plurality of subscribers, comprising:

means for receiving a plurality of scheduled broadcast programs in real-time;

means for selecting a portion of said broadcast programs;

means for processing said selected broadcast programs into temporally adjusted content, such that the temporally adjusted content is associated with said selected broadcast programs;

means for storing said temporally adjusted content;

means for broadcasting said plurality of scheduled broadcast programs to said plurality of subscribers; and

in a first mode of operation, means for streaming, on-demand, said temporally adjusted content to those subscribers viewing said selected broadcast programs currently being broadcast, such that said subscribers may interactively activate such temporally adjusted content contemporaneously with said currently broadcast programs.

This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT OR DRAWING
- BLURRED OR ILLEGIBLE TEXT OR DRAWING
- SKEWED/SLANTED IMAGES
- COLOR OR BLACK AND WHITE PHOTOGRAPHS
- GRAY SCALE DOCUMENTS
- LINES OR MARKS ON ORIGINAL DOCUMENT
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.